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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/711,715	11/13/2000	Tapio Mantysalo	413-009920-US(PAR)	7683

7590 11/25/2003
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EXAMINER

GRIER, LAURA A

ART UNIT	PAPER NUMBER
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2644

16

DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/711,715

Applicant(s)

MANTYSALO ET AL.

Examiner

Laura A Grier

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 4-7, 9 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the drawings and disclosure fails to support the electro-static discharge protector as an outer surface of the microphone.

Claim Objections

3. Claim 9 is objected to because of the following informalities: lines 5-6, recites "*inside an integrated circuit*". The examiner suggests the claim language to be written as "*on an integrated circuit*". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claim 3** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, line 2, recites "an outer surface". It is unclear as to what the applicant is inferring in respect to the position of the protector to the microphone capsule in respect drawing features the protector inside of the capsule area. Thus, the claim language/limitation is undefined and unclear.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2, 8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965).

The applicant's admitted prior art (herein, AAPA) discloses a microphone structure comprising a microphone capsule (figure 1 and page 1, lines 18-36 and page 2, lines 1-23) with 1st and 2nd output contacts, a converting means (page 1, lines 18-24); and amplifier (Q1) with a 1st and 2nd output conductor; a 1st capacitor (C11) positioned between the two conductor outputs, which reads on a 1st capacitor; coupled to an electro-static discharge protector (VDR1) to the contracts of the microphone capsule. Even though, AAPA discloses that a resistor (R11 –

impedance) may be added (in series) to lessen capacitive coupling, AAPA fails to specifically disclose a 1st impedance within the microphone capsule. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA by providing an impedance resistor such as resistor R11 into the circuitry provided within the microphone capsule, since it has been affirmed that the use of one structure instead of a structure of multiple parts as that disclosed by the AAPA would be merely a matter obviousness to one skilled in the art of microphone structure and function. *In re Larson*, 144 USPQ, 347 349 (CCPA 1965).

Regarding **claim 2**, AAPA and *In re Larson* discloses everything claimed as applied above (see claim 1). AAPA fails to specifically disclose the electro-static discharge protector within the microphone capsule. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA by providing an electro-static discharge protector into the circuitry provided within the microphone capsule, since it has been affirmed that the use of one structure instead of a structure of multiple parts as that disclosed by the AAPA would be merely a matter obviousness to one skilled in the art of microphone structure and function. *In re Larson*, 144 USPQ, 347 349 (CCPA 1965).

Regarding **claim 8**, AAPA and *In re Larson* discloses everything claimed as applied above (see claim 2). AAPA further discloses that components are comprised on the same circuit or circuit board (page 2, lines 5-6).

Regarding **claim 10**, AAPA and *In re Larson* discloses everything claimed as applied above (see claim 1). AAPA further discloses the electro-static discharge protector (VDR1) as being a varistor (page 2, lines 13-14).

Regarding **claim 10**, AAPA and In re Larson discloses everything claimed as applied above (see claim 1). AAPA and In re Larson fails to specifically disclose the electro-static discharge protector (VDR1) as a semiconductor (ZD). The examiner takes official notice that a Zener diode, which a semiconductor device/component was well known. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA and In re Larson by providing a Zener diode as electro-static discharge protector for the purpose of reducing noise problems or the like that may produced by components on a circuit board, wherein the Zener diode is a common component of a conventional ESD protection circuit.

8. Claims 4-7, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments filed 09/22/03 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the function and purpose of the 1st impedance) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Further, the applicant argues that the rejection of AAPA (applicant's admitted prior art) and In re Larson as being inappropriate to overcome the invention as claimed based upon the fact that In re Larson' decision is based upon vehicular means, which the applicant states does not have anything to do with the integration of a microphone structure. It is agreed that the subject matter of Larson does vary from the invention at hand, however, not the case law decision, and therefore may be applied various to applications of integration of part.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

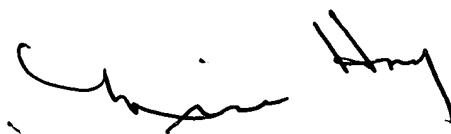
Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG
November 20, 2003



**MINSUN OH HARVEY
PRIMARY EXAMINER**